

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

EMC CORPORATION, EMC	)	
INTERNATIONAL COMPANY, and EMC	)	
INFORMATION SYSTEMS	)	
INTERNATIONAL,	)	
	)	
Plaintiffs,	)	
	)	
v.	)	CA. No. 13-1985-RGA
	)	
PURE STORAGE, INC.,	)	
	)	
Defendant.	)	
	)	

**DEFENDANT PURE STORAGE, INC.'S SECOND AMENDED ANSWER TO  
PLAINTIFFS' AMENDED COMPLAINT FOR INJUNCTIVE RELIEF AND DAMAGES**

In response to Plaintiff EMC Corporation's ("EMC"), EMC International Company's ("EIC"), and EMC Information Systems International's ("EISI") (collectively, "Plaintiffs") First Amended Complaint ("Complaint"), Defendant Pure Storage, Inc. ("Pure Storage") demands a trial by jury on all issues so triable and answers as follows:

**NATURE OF ACTION**

1. Pure Storage admits that it introduced the FlashArray in 2011. Pure Storage denies that it infringes EMC's patents. Pure Storage lacks sufficient information to form a belief as to the truth of the remainder of the allegations in paragraph 1 of the Complaint and on that basis denies those allegations.

**PARTIES**

2. Pure Storage lacks sufficient information to form a belief as to the truth of the allegations in paragraph 2 of the Complaint and on that basis denies those allegations.

3. Pure Storage lacks sufficient information to form a belief as to the truth of the allegations in paragraph 3 of the Complaint and on that basis denies those allegations.

4. Pure Storage lacks sufficient information to form a belief as to the truth of the allegations in paragraph 4 of the Complaint and on that basis denies those allegations.

5. Pure Storage admits that it is a Delaware corporation with headquarters in Mountain View, California. Pure Storage admits that it manufactures and sells a data storage system based on flash memory that it offers for sale under the name “FlashArray.” Pure Storage denies the remainder of the allegations in paragraph 3 of the Complaint.

### **JURISDICTION AND VENUE**

6. Pure Storage admits that EMC purports to bring this action under the patent laws of the United States, Title 35 of the United States Code. Pure Storage also admits that EMC purports to establish subject matter jurisdiction in the United States District Court based on 28 U.S.C. §§ 1331 and 1338. The remainder of the allegations in paragraph 6 of the Complaint state legal conclusions to which no response is required.

7. Pure Storage admits that it is incorporated in Delaware. The remainder of the allegations in paragraph 7 of the Complaint state legal conclusions to which no response is required.

8. The allegations in paragraph 8 of the Complaint state legal conclusions to which no response is required.

### **FACTUAL BACKGROUND**

9. Pure Storage lacks sufficient information to form a belief as to the truth of the allegations in paragraph 9 of the Complaint and on that basis denies those allegations.

10. Pure Storage lacks sufficient information to form a belief as to the truth of the allegations in paragraph 10 of the Complaint and on that basis denies those allegations.

11. Pure Storage admits that EMC purports to place at issue in this action five United States patents allegedly owned by EMC. Pure Storage lacks sufficient information to form a

belief as to the truth of the remainder of the allegations in paragraph 11 of the Complaint and on that basis denies those allegations.

12. Pure Storage admits that the '556 Patent, on its face, indicates that it was issued on June 7, 2005. Pure Storage admits that the '556 Patent, on its face, is titled "Systems and Methods which Utilize Parity Sets." Pure Storage admits that the '556 Patent, on its face, states that John K. Walton, Michael Bermingham and Christopher S. MacLellan are the inventors of the '556 Patent. Pure Storage lacks sufficient information to form a belief as to the truth of the remainder of the allegations in paragraph 12 of the Complaint and on that basis denies those allegations.

13. Pure Storage admits that the '475 Patent, on its face, indicates that it was issued on July 5, 2005. Pure Storage admits that the '475 Patent, on its face, is titled "Data Integrity Management for Data Storage Systems." Pure Storage admits that the '475 Patent, on its face, states that Victor W. Tung and Stephen Lawrence Scaringella are the inventors of the '475 Patent. Pure Storage lacks sufficient information to form a belief as to the truth of the remainder of the allegations in paragraph 13 of the Complaint and on that basis denies those allegations.

14. Pure Storage admits that the '464 Patent, on its face, indicates that it was issued on May 13, 2008. Pure Storage admits that the '464 Patent, on its face, is titled "Efficient Data Storage System." Pure Storage admits that the '464 Patent, on its face, states that Ming Benjamin Zhu, Kai Li and R. Hugo Patterson are the inventors of the '464 Patent. Pure Storage lacks sufficient information to form a belief as to the truth of the remainder of the allegations in paragraph 14 of the Complaint and on that basis denies those allegations.

15. Pure Storage admits that the '015 Patent, on its face, indicates that it was issued on October 7, 2008. Pure Storage admits that the '015 Patent, on its face, is titled "Efficient Data

Storage System.” Pure Storage admits that the ’015 Patent, on its face, states that Ming Benjamin Zhu, Kai Li and R. Hugo Patterson are the inventors of the ’015 Patent. Pure Storage lacks sufficient information to form a belief as to the truth of the remainder of the allegations in paragraph 15 of the Complaint and on that basis denies those allegations.

16. Pure Storage admits that the ’187 Patent, on its face, indicates that it was issued on February 12, 2013. Pure Storage admits that the ’187 Patent, on its face, is titled “I/O Scheduling for Flash Drives.” Pure Storage admits that the ’187 Patent, on its face, states that Kendell Chilton and Sachin More are the inventors of the ’187 Patent. Pure Storage lacks sufficient information to form a belief as to the truth of the remainder of the allegations in paragraph 16 of the Complaint and on that basis denies those allegations.

17. Pure Storage admits that it released versions of the software and hardware that comprise its FlashArray product in 2011 and 2012, and that it plans to release another version of its FlashArray product in 2014. Pure Storage denies the remainder of the allegations in paragraph 15 of the Complaint.

**COUNT ONE**  
**Infringement of U.S. Patent No. 6,904,556**

18. Pure Storage admits that paragraph 18 of the Complaint purports to reallege and to incorporate by reference paragraphs 1-17 of the Complaint.

19. Pure Storage admits that a copy of the ’556 Patent is attached to the Complaint. Pure Storage lacks sufficient information to form a belief as to the truth of the remainder of the allegations in paragraph 19 of the Complaint and on that basis denies those allegations.

20. Pure Storage denies the allegations in paragraph 20 of the Complaint.

21. Pure Storage denies the allegations in paragraph 21 of the Complaint.

22. Pure Storage admits that it produces and/or makes available to its FlashArray customers user, installation, and support guides, marketing videos, and a website that includes the URLs referenced in paragraph 22 of the Complaint. Pure Storage denies the remainder of the allegations in paragraph 22 of the Complaint.

23. Pure Storage denies the allegations in paragraph 23 of the Complaint.

24. Pure Storage denies the allegations in paragraph 24 of the Complaint.

25. Pure Storage denies the allegations in paragraph 25 of the Complaint.

**COUNT TWO**  
**Infringement of U.S. Patent No. 6,915,475**

26. Pure Storage admits that paragraph 26 of the Complaint purports to reallege and to incorporate by reference paragraphs 1-17 of the Complaint.

27. Pure Storage admits that a copy of the '475 Patent is attached to the Complaint. Pure Storage lacks sufficient information to form a belief as to the truth of the remainder of the allegations in paragraph 27 of the Complaint and on that basis denies those allegations.

28. Pure Storage denies the allegations in paragraph 28 of the Complaint.

29. Pure Storage denies the allegations in paragraph 29 of the Complaint.

30. Pure Storage admits that it produces and/or makes available to its FlashArray customers user, installation, and support guides, marketing videos, and a website that includes the URL referenced in paragraph 30 of the Complaint. Pure Storage denies the remainder of the allegations in paragraph 30 of the Complaint.

31. Pure Storage denies the allegations in paragraph 31 of the Complaint.

32. Pure Storage denies the allegations in paragraph 32 of the Complaint.

33. Pure Storage denies the allegations in paragraph 33 of the Complaint.

**COUNT THREE**  
**Infringement of U.S. Patent No. 7,373,464**

34. Pure Storage admits that paragraph 34 of the Complaint purports to reallege and to incorporate by reference paragraphs 1-17 of the Complaint.

35. Pure Storage admits that a copy of the '464 Patent is attached to the Complaint. Pure Storage lacks sufficient information to form a belief as to the truth of the remainder of the allegations in paragraph 35 of the Complaint and on that basis denies those allegations.

36. Pure Storage denies the allegations in paragraph 36 of the Complaint.

37. Pure Storage denies the allegations in paragraph 37 of the Complaint.

38. Pure Storage admits that it produces and/or makes available to its FlashArray customers user, installation, and support guides, marketing videos, and a website that includes the URLs referenced in paragraph 38 of the Complaint. Pure Storage denies the remainder of the allegations in paragraph 38 of the Complaint.

39. Pure Storage denies the allegations in paragraph 39 of the Complaint.

40. Pure Storage denies the allegations in paragraph 40 of the Complaint.

41. Pure Storage denies the allegations in paragraph 41 of the Complaint.

**COUNT FOUR**  
**Infringement of U.S. Patent No. 7,434,015**

42. Pure Storage admits that paragraph 42 of the Complaint purports to reallege and to incorporate by reference paragraphs 1-17 of the Complaint.

43. Pure Storage admits that a copy of the '015 Patent is attached to the Complaint. Pure Storage lacks sufficient information to form a belief as to the truth of the remainder of the allegations in paragraph 43 of the Complaint and on that basis denies those allegations.

44. Pure Storage denies the allegations in paragraph 44 of the Complaint.

45. Pure Storage denies the allegations in paragraph 45 of the Complaint.

46. Pure Storage admits that it produces and/or makes available to its FlashArray customers user, installation, and support guides, marketing videos, and a website that includes the URLs referenced in paragraph 46 of the Complaint. Pure Storage denies the remainder of the allegations in paragraph 46 of the Complaint.

47. Pure Storage denies the allegations in paragraph 47 of the Complaint.

48. Pure Storage denies the allegations in paragraph 48 of the Complaint.

49. Pure Storage denies the allegations in paragraph 49 of the Complaint.

**COUNT FIVE**  
**Infringement of U.S. Patent No. 8,375,187**

50. Pure Storage admits that paragraph 50 of the Complaint purports to reallege and to incorporate by reference paragraphs 1-17 of the Complaint.

51. Pure Storage admits that a copy of the '187 Patent is attached to the Complaint. Pure Storage lacks sufficient information to form a belief as to the truth of the remainder of the allegations in paragraph 51 of the Complaint and on that basis denies those allegations.

52. Pure Storage denies the allegations in paragraph 52 of the Complaint.

53. Pure Storage denies the allegations in paragraph 53 of the Complaint.

54. Pure Storage admits that it produces and/or makes available to its FlashArray customers user, installation, and support guides, marketing videos, and a website that includes the URL referenced in paragraph 54 of the Complaint. Pure Storage denies the remainder of allegations in paragraph 54 of the Complaint.

55. Pure Storage denies the allegations in paragraph 55 of the Complaint.

56. Pure Storage denies the allegations in paragraph 56 of the Complaint.

57. Pure Storage denies the allegations in paragraph 57 of the Complaint.

**JURY DEMAND**

58. No response is required to Plaintiffs' demand for a jury trial.

59. Pure Storage denies each and every allegation made in Plaintiffs' Complaint that is not expressly admitted herein.

**AFFIRMATIVE DEFENSES**

Subject to the responses above, Pure Storage alleges and asserts the following defenses in response to the allegations, undertaking the burden of proof only as to those defenses deemed affirmative defenses by law, regardless of how such defenses are denominated herein. In addition to the affirmative defenses listed below, Pure Storage specifically reserves all rights to allege additional affirmative defenses that become known through the course of discovery.

**FIRST DEFENSE**  
**(INVALIDITY)**

One or more of the claims of the '556 Patent, the '475 Patent, the '464 Patent, the '015 Patent, and the '187 Patent asserted by Plaintiffs (collectively, "the EMC Patents-in-Suit") are invalid for failure to satisfy the conditions of patentability set forth in 35 U.S.C. §§ 101, 102, 103, and/or 112, including, but not limited to, utility, novelty, non-obviousness, enablement, written description and definiteness.

**SECOND DEFENSE**  
**(NON-INFRINGEMENT OF THE PATENTS)**

Pure Storage has not infringed and does not infringe any valid and enforceable claim of the EMC Patents-in-Suit, directly or indirectly, literally or under the doctrine of equivalents.



**THIRD DEFENSE**  
**(LACHES)**

Upon information and belief,<sup>1</sup> Plaintiffs' claims and the relief sought by Plaintiffs in relation to the EMC Patents-in-Suit are barred in whole or in part by the equitable doctrine of laches. EMC delayed filing this action for over two years, EMC's delay was both unreasonable and inexcusable, and Pure Storage suffered material prejudice as a result of it.

On information and belief, EMC knew or should have known of its alleged claims since August 2011. Pure Storage first developed the accused FlashArray product in 2009, began to ship beta products in 2011, and has been shipping general-availability releases since July 2012. Pure Storage is currently on its fourth-generation system. Pure Storage and its products have received media and industry attention since the company's founding. On information and belief, EMC has been aware of Pure Storage's use of the accused features in this action since August 2011, when Pure Storage first released technical documents and videos on its public website identifying the architecture and key differentiating features of its FlashArray product, including its systems and methods of error correction, RAID, deduplication, and I/O scheduling. Pure Storage also participated in numerous storage industry events attended by EMC, and hired the first of several former EMC employees in September 2011. On information and belief, these events put EMC on further notice to investigate Pure Storage's product.

EMC filed suit against Pure on November 26, 2013, over two years after EMC first obtained technical knowledge about Pure Storage's products. In light of the time between EMC's actual or constructive knowledge of its alleged claims against Pure Storage and the filing of its complaint, EMC's delay in bringing this action is unreasonable and inexcusable.

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<sup>1</sup> Where Pure Storage alleges facts in support of its laches defense on information and belief, such information is likely in the exclusive possession of EMC.

Further, EMC's delay has materially prejudiced Pure Storage. Given Pure Storage's recent introduction of its sole product, a two-year delay is a substantial portion of the company's sales history. In the two years prior to EMC's filing, Pure invested millions of dollars in researching, developing, producing, marketing and selling the allegedly infringing product. EMC's delay in bringing suit prevented Pure from considering potential design-alternatives during that period. Furthermore, in the two years prior to EMC's filing, witnesses' memories have faded and potentially relevant documents have become more time-consuming and expensive to locate and collect.

Because EMC's delay in filing this action was unreasonable and inexcusable, and resulted in material prejudice to Pure Storage, EMC's claims are barred in whole or in part under the doctrine of laches.

**FOURTH DEFENSE**  
**(UNCLEAN HANDS)**

Plaintiffs' claims and the relief sought by Plaintiffs in relation to the EMC Patents-in-Suit are barred in whole or in part by the doctrine of unclean hands, because EMC engaged in inequitable conduct regarding the '475 Patent, as alleged in Pure Storage's Sixth Defense (Inequitable Conduct).

**FIFTH DEFENSE**  
**(FAILURE TO STATE A CLAIM)**

Plaintiffs' claims in relation to the EMC Patents-in-Suit all fail to state a claim upon which relief can be granted.

**SIXTH DEFENSE**  
**(INEQUITABLE CONDUCT)**

The '475 Patent is unenforceable due to the inequitable conduct of EMC, specifically the named inventors of the '475 Patent, Victor W. Tung and Stephen Lawrence Scaringella, and its

Prosecution Counsel, Fish & Richardson P.C. attorneys Gary Walpert and John Gunther. These individuals were associated with the filing and prosecution of the application leading to issuance of the '475 Patent.

On information and belief,<sup>2</sup> at least Tung, Scaringella, Walpert and Gunther knew of at least one material EMC-owned prior art patent that Walpert and Gunther had themselves prosecuted on behalf of EMC, and, with specific intent to deceive, withheld it from the United States Patent and Trademark Office (the "Patent Office") during prosecution of the '475 Patent. The Patent Office would not have allowed one or more claims of the '475 Patent had it been aware of the withheld prior art.

The EMC prior art patents prosecuted by Walpert and Gunther that EMC, Walpert and Gunther failed to disclose to the Patent Office during the prosecution of the '475 Patent include at least the following prior art patent that is "but/for" material to at least one claim of the '475 Patent: U.S. Patent No. 5,719,885 (Ofer, et al.); filed Dec. 28, 1995; issued Feb. 17, 1998 ("the Ofer '885 Patent").

On information and belief, the named inventors of the prior art Ofer '885 Patent, Erez Ofer and Natan Vishlitzky, were both well-known senior engineers at EMC and were colleagues of the named inventors of the '475 Patent, Tung and Scaringella, at the time that the '475 Patent application was filed and prosecuted. Ofer, Vishlitzky, Tung, and Scaringella all worked on the same family of EMC data storage products. On information and belief, Tung and Scaringella knew of Ofer's and Vishlitzky's patents, including the Ofer '885 Patent. That Tung and Scaringella were familiar with Ofer's and Vishlitzky's inventive work at the time the '475 Patent

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<sup>2</sup> Where Pure Storage alleges facts in support of its inequitable conduct defense on information and belief, such information is likely in the exclusive possession of either EMC or Fish & Richardson P.C.

application was filed is further evidenced by the fact that both Tung and Scaringella cite and discuss other work by Vishlitzky in at least U.S. Patents Nos. 6,493,795; 6,578,128; 6,643,722; 6,738,842; 6,880,032; European Patent Specification No. EP 1 058 888, and International Patent Application No. WO 2000039690. Tung filed the '795 Patent application on December 30, 1998, six months before the '475 Patent application, and the other patents identified above were filed by Tung and/or Scaringella between 1999 and 2001, during the ongoing prosecution of the '475 Patent.

EMC and its Prosecution Counsel Fish & Richardson (including Walpert and Gunther) applied for the '475 Patent on June 29, 1999. In conjunction with the application, the inventors Tung and Scaringella signed and submitted to the Patent Office Powers of Attorney appointing attorneys at Fish & Richardson, including Walpert and Gunther, to "prosecute this application and to transact all business in the Patent and Trademark Office connected therewith." At the same time, Tung and Scaringella also submitted an oath to the Patent Office with the application for the '475 Patent acknowledging and affirming "the duty to disclose information which is material to the examination of the application" in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

Attorneys from Fish & Richardson corresponded directly with the Patent Office Examiner concerning the inventions claimed in the '475 Patent application and the Examiner's rejection of the '475 Patent application based upon the prior art that the Examiner was able to identify. On information and belief, Walpert and Gunther had at least the right and opportunity to comment on, and suggest changes to, the '475 Patent application. But despite their association and involvement with the filing and prosecution of the '475 Patent application, on information and belief, Walpert and Gunther deliberately withheld material prior art that they knew of and

had been directly involved in obtaining on behalf of EMC, and instead selectively disclosed only less relevant prior art that could be differentiated from the claimed invention. Specifically, on information and belief, Walpert and Gunther, acting on behalf of the inventors and EMC, deliberately withheld the prior art Ofer '885 Patent from the Examiner.

The Ofer '885 Patent discloses or suggests each and every element of, and anticipates or renders obvious, at least claims 1, 2, 3, 14, 15, and 17 of the '475 Patent. On information and belief, had the Patent Office known this, at least these claims would not have issued.

The prior art Ofer '885 Patent discloses a method and apparatus for maintaining the integrity of transmitted data, in part by receiving a plurality of blocks of data having a predetermined multiple-block error detecting code, reading each of the plurality of blocks of data, generating, for each block, an information containing portion including an individual error detecting code for the block of data, and storing each block of data and each corresponding information containing portion. The Ofer '885 Patent further discloses a storage system comprising a plurality of storage array devices for storing data used by a plurality of hosts, each host capable of transmitting blocks of data, a channel adapter associated with a host, which channel adaptor includes a data block integrity unit for applying and storing error detection information with transmitted blocks of data, and a storage array adaptor associated with a corresponding storage array device, which storage array adaptor includes a second data block integrity unit for retrieving data blocks from the corresponding storage array device and checking the error detection information associated with the stored blocks of data.

Specifically, the Ofer '885 Patent discloses the following elements that are also disclosed in the '475 Patent:

The Ofer '885 Patent discloses receiving a plurality of blocks of data having a predetermined multiple-block error detecting code:

- For example, the Ofer '885 Patent discloses: “generating and associating with a group of the blocks of data, from the host computer, a second error code.” (2:55-57, Fig. 4, 5:4-13) The Ofer '885 Patent further discloses a method that “generates a new sector CRC” covering a “number of blocks.” (2:66-3:8) The Ofer '885 Patent further discloses that this “second error code” is “written to disk.” (Abstract, Figs. 4-6) The Ofer '885 Patent discloses that “the channel director, when it writes eight blocks to the data cache, calculates a CRC for the entire eight blocks and stores it in position 66 in the ID table, in a location corresponding to the sector (8 blocks) being written. A typical ID table is illustrated in FIG. 4.” (5:9-13) “Thereafter, when the disk director writes that sector to the disk drive, it also writes the now changed ID table for that track.” (5:19-21, 7:33-42)
- The Ofer '885 Patent further discloses that “when the disk director reads data from the disk drive, it checks the integrity of the read data based upon its own, previously attached, ECC.” (2:14-17)
- The Ofer '885 Patent also incorporates by reference the disclosures of U.S. Patent No. 5,206,939. (4:8-12) Those disclosures include “CKD formatted data” records received from the host. ('939 patent, Fig. 2, 4:23-27) CKD formatting includes predetermined error detecting codes spanning data fields that can include multiple blocks. ('939 patent, 5:35-41)

The Ofer '885 Patent discloses receiving, reading, and formatting blocks of data:

- For example, the Ofer '885 Patent discloses: “sending a plurality of blocks of data from the host computer to a channel director; writing the blocks of data, according to a selected format, in a cache memory ....” (2:46-49)
- The Ofer '885 Patent further discloses that: “The disk writing step features the steps of calculating and attaching to each block an error correcting code value” (2:53-55) The Ofer '885 Patent further discloses that: “Typically, when data is written from the host computer to the cache memory for storage, the channel director adds to each block of data an error correcting code of some kind . . .” (1:52-58) “Writing to the disk includes, transparently to the host, the calculation and attachment to each block of an error correcting code value.” (Abstract, 7:30-32, 2:53-55)

The Ofer '885 Patent discloses generating an information containing portion that includes an individual error detecting code for the block of data:

- For example, the Ofer '885 Patent discloses that: “Typically, when data is written from the host computer to the cache memory for storage, the channel director adds to each block of data an error correcting code of some kind, for example, a CRC code, and can further add, a physical address identifying, for example, the cache address, the disk drive device number, cylinder number, and drive head number.” (1:52-58) “Writing to the disk includes, transparently to the host, the calculation and attachment to each block of an error correcting code value.” (Abstract, 7:30-32, 2:53-55)
- The Ofer '885 Patent further discloses that “the disk lays down a pattern on the magnetic media that includes a data block 40 followed by an error correcting code

(ECC) 42, followed by a data block 44, followed by an error correcting code (ECC) 46, and so forth.” (4:13-19, Fig. 2) The Ofer ’885 Patent also discloses that channel directors that “add error correcting CRC data” to blocks of data from the host (2:35-41, 4:28-35, Fig. 3)

- The Ofer ’885 Patent further discloses methods wherein “the CRC for every newly written block is calculated and stored in cache.” (6:13-14) The Ofer ’885 Patent also discloses systems in which the disk director “creates its own error correcting code (ECC), and uses its error correcting code to verify the accuracy and reliability of the data when it is read from the disk drive storage into the data cache. The disk director also, in these prior art systems, recreates the CRC’s [sic] at the end of each block, and further provides the physical address information when it stores the data retrieved from the disk drive in the data cache” (4:48-55)

The Ofer ’885 Patent discloses storing each block of data and corresponding information portion:

- For example, the Ofer ’885 Patent discloses that: “the disk lays down a pattern on the magnetic media that includes a data block 40 followed by an error correcting code (ECC) 42, followed by a data block 44, followed by an error correcting code (ECC) 46, and so forth.” (4:13-19, Fig. 2)
- The Ofer ’885 Patent further discloses that: “Typically, when data is written from the host computer to the cache memory for storage, the channel director adds to each block of data an error correcting code of some kind, for example, a CRC code, and can further add, a physical address identifying, for example, the cache address, the disk drive device number, cylinder number, and drive head number.”



(1:52-58) The Ofer '885 Patent discloses that: "Writing to the disk includes, transparently to the host, the calculation and attachment to each block of an error correcting code value." (Abstract, 7:30-32, 2:53-55)

- The Ofer '885 Patent further discloses methods wherein "the CRC for every newly written block is calculated and stored in cache." (6:13-14, Fig. 6) The Ofer '885 Patent discloses that this CRC may also be stored with the data on disk: "In this case, there is additional space for the channel director to add error correcting CRC data, which the disk director will treat as data when it unites its 512 byte blocks to disk." (2:38-41)

The Ofer '885 Patent was particularly material to the prosecution of the '475 Patent, and was not cumulative of other art that was before the examiner, because it disclosed elements that the applicant argued were absent from the prior art during prosecution in order to obtain allowance of the claims. For example, in a response filed Mar. 11, 2002, the applicant argued that certain prior art references did not contain the independent claim language "plurality of blocks of data having a predetermined multiple-block error detecting code." Thereafter, the Examiner allowed claim 1 to issue. Yet the Ofer '885 patent disclosed a "second error code" associated with "a group of the blocks of data, from the host computer." See, e.g., '885 patent at 2:55-57. The Ofer '885 Patent thus discloses the element of claim 1 discussed by the Examiner, along with all of the other elements of claims 1, 2, 3, 14, 16, and 17 of the '475 Patent. The EMC-owned Ofer '885 Patent was prosecuted by Fish & Richardson, the same law firm that prosecuted the '475 Patent on behalf of EMC. Moreover, Walpert and Gunther were both involved in the prosecution of the Ofer '885 and the '475 Patents. Walpert signed most of the application materials in the Ofer '885 application, and both Walpert and Gunther were

authorized to transact all business related to both the Ofer '885 Patent and '475 Patent applications. On information and belief, Walpert and Gunther had the right and opportunity to comment on, and suggest changes to, both the Ofer '885 Patent and '475 Patent applications. Moreover, the Patent Office granted the Ofer '885 Patent on February 17, 1998, sixteen months prior to EMC's submission of the '475 Patent application. Thus, on information and belief, Tung, Scaringella, Walpert, and Gunther had actual knowledge of the prior art Ofer '885 Patent before and during the prosecution of the '475 Patent application. Yet neither the inventors nor EMC's Prosecution Counsel (including Walpert and Gunther) disclosed the Ofer '885 Patent to the Examiner.

On information and belief, EMC (through Tung and Scaringella) and at least Walpert, and Gunther deliberately withheld the known and highly material Ofer '885 Patent during the prosecution of the '475 Patent application with the specific intent to deceive the Patent Office. The inference that the aforementioned individuals deliberately withheld highly material prior art with deceptive intent is bolstered by both (i) the absence of a good faith explanation for the Ofer '885 Patent's nondisclosure and (ii) their selective disclosure of less relevant prior art. For example, on or about December 2000, Prosecution Counsel, acting on behalf of EMC, Tung, and Scaringella, provided the Patent Office with an Information Disclosure Statement, supposedly disclosing all known printed publications relevant to the '475 Patent, yet the prior art Ofer '885 Patent was not identified. And in the '475 Patent application, Prosecution Counsel described and then proceeded to differentiate various these less relevant prior art references and implementations. At the same time that Prosecution Counsel disclosed and differentiated these less relevant prior art references and implementations, Prosecution Counsel withheld the most

material prior art, the Ofer '885 Patent, from the Patent Office, despite Walpert's and Gunther's actual knowledge of that prior art.

On information and belief, had the Examiner known of the disclosures in the prior art Offer '885 Patent, the Examiner would have finally rejected at least claims 1, 2, 3, 14, 15 and 17 of the '475 Patent.

Because of the inequitable conduct during the prosecution of the '475 Patent application of EMC (through at least Tung and Scaringella) and its Prosecution Counsel (through at least Walpert and Gunther), the '475 Patent is unenforceable.

#### **PRAYER FOR RELIEF**

WHEREFORE, Pure Storage denies that Plaintiffs are entitled to any of the relief requested in Plaintiffs' Prayer for Relief. Pure Storage therefore requests that the Court enter judgment in Pure Storage's favor and against Plaintiffs on all of Plaintiffs claims; that the Court award Plaintiffs no relief whatsoever, that the Court find this case exceptional and award Pure Storage its costs and attorneys' fees pursuant to 35 U.S.C. § 285; and that the Court award Pure Storage such other further relief as the Court deems appropriate.

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Pure Storage demands a trial by jury on all issues so triable.

Respectfully submitted,

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